Volume 28 No. 04 April 1999

Anchorage Amateur Radio Club

General Meeting Friday April 2, 1999

IN THIS ISSUE:

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membership to frederickson@iname.com
activities to kl0cy@arrl.net
News Letter Submissions, Information or corrections:
Submissions must be received 2 weeks before meeting
Email: **KL0CY@arrl.net** Facsimile: 907-338-4791
Mail: 7013 Trafford Ave. Anchorage 99504

KL7G CODE PRACTICE SCHEDULE

Schedule: 7:00am, 10:00am, 4:00pm, 7:00pm, 10:00pm AK time, every day Frequencies: 3575 Khz, 7075 Khz & 145.35 Mhz: Sending Speeds: 22 wpm, 15 wpm, 7 wpm

Nets in Alaska:

The following nets are active in South-central Alaska:
Alaska Sniper's Net 3.920 MHz 6:00 PM daily
Alaska Bush Net 7.093 MHz 8:00 PM daily
Alaska Motley Net 3.933 Mhz 9:00 PM daily
Alaska Pacific Emergency Preparedness Net 14.292 MHz 8:30 AM M-F
QCWA net 146.97/.37 repeater Sundays 8:00 PM local
850 No Name Net 146.85/.25 repeater Sundays 8:00 PM
Son of Sideband Net 144.20 USB Mondays 9:00 PM local
Big City Simplex Net 146.520 FM Tuesdays 8:00 PM local
ARES net 147.30/.90 Mhz Thursdays at 8:00 PM local
PARKA net 147.30/.90 Mhz Thursdays at 9:00 PM local

Anchorage & Mat Valley Area Repeaters

KL7AA systems at Flattop Mt., 2,200 ft
146.34/94 Mhz, 80 watts, autopatch, 100/141.3 Hz PL
223.34/224.94, 25 watts, no patch, no PL
444.70/449.70, 25 watts, autopatch, 100/141.3 PL
KL7ION at Mt. Gordon Lyon 4,700 ft
147.30/90 Mhz - 80 watts, no patch, no PL
KL7AA, Mt. Alyeska, 2,400 ft.
146.16/76 Mhz, 25 watts, no patch, 141.3 Hz PL
KL7CC, Anchorage Hillside, SCRC club
146.97/.37 Mhz, autopatch, 103.5 Hz PL
KL7DJE at Grubstake Peak, 4,500 ft.
147.09/.69 Mhz, 25 watts, no patch, 100 Hz PL
444.925/449.925, 10 watts, no patch, 141.3 Hz PL
KL7JFU, Palmer, MARA club
146.85/.25, autopatch, no PL
KL7AIR Elmendorf, EARS
147.27/.87 no patch, 107.2 Hz PL
KL7G West Anchorage & Events
449.65/444.65 Mhz, patch, no PL

Anchorage & Mat Valley Simplex Frequencies

146.52 Mhz Calling and Emergency frequency
147.57 / 447.57 (crossband linked) HF spotters & chat
146.49 Mhz Anchorage area simplex chat
146.41 Mhz Mat Valley simplex chat

~~~ HOT LINKS ~~~

Internet Web links. the favorites from our readers
AARC http://kl7aa.akconnect.com
SCRC http://www.servcom.com/worcester/scrc.htm
EARS http://www.qsl.net/kl7air
KL7J http://www.alaska.net/~buchholz
Fairbanks AARC:
http://ffdlm1mac.uafsom.alaska.edu/aarc/aarc.html
Yukon Amateur Radio Association:
http://www.klondike.com/vara/index.html
HAARP Project:
http://server5550.itd.nrl.navy.mil/projects/haarp/
<<Amateur Radio Reference Library>>
http://www.area-ham.org/library/libindex.html
Hamradio: http://www.hamrad.com/
Solar Terrestrial Activity http://209.130.27.95/solar/
ARRL http://www.arrl.org/
Propagation Report Recording 566-1819
please let us know if there are other club pages or good starting points that should appear here

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VHF NETS ABOUND

All HAMs take note: there are lots of nets and nice folks to visit with. The Son of Sideband Net runs each Monday night at 9:00 PM local on 144.200 MHz USB. with a 6 Meter extension on 50.200 MHz USB. On Tuesday night, the Big City Simplex Net operates on 146.520 FM at 8:00 PM local with a 70cm checkin on 446.00 FM and a 6M checkin on 52.525 FM immediately following. On Thursday the ARES net starts at 8:00 PM on the 147.30/.90 repeater with Amateur News line followed at 9:00 PM by the PARKA net. On Sunday there are two nets at the same time. In Anchorage, the QCWA net runs at 8:00 PM on the 146.97/.37 repeater (103.5 Hz PL) and in the valley the 850 No Name Net runs on the 146.85/.25 repeater.

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NEWSLETTER ARTICLES: All articles from members and interested persons are very welcome. If you wish to submit any articles, jokes, cartoons, please have it typed or neatly handwritten. It can be submitted by computer disk, fax, or E-mail to the newsletter editor at the address listed on the cover. Submissions must be in the hands of the editor at least two weeks prior to the meeting.

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Regular HAM Gatherings:

* **Tuesdays, 11:30 AM to 1:00 PM:** Join the gang for lunch and an eyeball QSO at the Royal Fork, Penland Park, East.

Saturdays, 7:30 AM: Here is a great way to get started on the week-end come and meet with some of the locals and have a great breakfast at Phillips Restaurant, at the corner of Arctic and International. Great Fun.

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This Month's Speaker
Jim Larsen will share the joys of QRP (low power radio), see the article and flier that follows.

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THIS MONTH'S EVENTS

April 2: ARRC general meeting at 7:00 PM The meeting will be at the Carr-Gottstein Building, on the APU Campus. Talk in will be on 147.300.

April 7: VE License Exams 6:30 PM Carr-Gottstein Building, APU Campus. Bring photo ID, copy of license (if any) and any certificates of completion.

April 9: SCRC general meeting at 7:00 PM room 220 Business Ed. Bldg., UAA campus. Talk in on 147.3 simplex.

April 10: ARES Planning Committee 9:30 AM. It will be at the American Red Cross at 8th and Cordova. Everyone welcome. Focusing on preparedness and training.

April 17: PARKA Meeting at 11:00 AM. The meeting is at Peggy's on the Glen Highway.

April 17: VE License Exams. Hope Cottage Offices, 540 W. International in the Board Room. At 2:00 PM. Be sure to bring photo ID, copy of license (if any) and any certificates of completion.

April 24: MARA Hamfest at the Palmer Train Station from 10:00 AM to 3:00PM

April 30: MARA meeting at the MTA office in Palmer at 7PM

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Went to John Bierman, KL7GNP, who is in the Providence hospital room 558, this afternoon and he seems about the same. Sort of in and out of it due to the medication. Dorothy sez he had eaten a good lunch and has shown some improvement. Johns sez he regrets missing the EARS Flea mart, but hopes to be at the next one.

In case you don't remember, John was the QSL manager for Alaska for several years before turning the Bureau over to Roger, KL7HFQ. 73 Jim, KL7CDG

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FCC official meets Hams on their own turf

Worldradio

The FCC's Amateur Radio enforcer, Riley Hollingworth, K4ZDH, turned up in an unexpected place on January 13th – 75 Meters! In what could be an unprecedented move, Hollingworth, legal advisor for amateur enforcement within the FCC's Compliance and Information Bureau, showed up on 3894.5 kHz to discuss enforcement and encourage compliance.

"A couple of them were pretty shocked," he said. "This has never been tried before," Hollingsworth said the next morning. He said he broke in on an argument that was growing increasingly nasty in an effort to settle things down, then stayed to discuss enforcement with the amateurs on frequency.

Hollingsworth says he thinks one key to compliance is just getting people to listen to what he has to say. "Most people, if you can just get to them on a one-to-one basis, will listen," he said, reflecting his overall enforcement approach to attempt to reason violators into voluntary compliance rather than writing them up. During his time on the air, Hollingworth confronted one individual he'd already been in touch with about alleged on-air misbehavior.

Among other things, he told those on hand that noncompliance and inappropriate on-air behavior could even threaten the hobby's HF allocations. Hollingsworth advised Hams to be more tolerant and patient and to avoid confrontation or retaliation.

"We all have to realize we're on a mission here – to save Amateur Radio," he said the day after his 75-meter appearance.

Hollingsworth says he understood from the others on frequency that someone was attempting to jam his signal. "I hope the monitoring folks were on the frequency, too," he said.

Hollingsworth advised the Hams on 75 to contact him with enforcement problems, and he gave out his e-mail address and telephone number (**Error! Bookmark not defined.** (717) 338-2502). "I don't know what effect it will have," he said of his on-air foray. Hollingsworth says he'll "do what it takes" to improve amateur compliance and that could include future on-air visits with amateurs.

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Swiss yes and no to no-code

W5YI, Newsline

Switzerland's national Amateur Radio Society has done an about face on the issue of abolishing Morse code testing. Last November the societies journal published a statement regarding the code. It that said Morse code testing in the Amateur Service no longer serves any useful purpose.

But the commentary by the Swiss angered the neighboring Germans. Their Deutscher Amateur Radio Society, the DARC, was more than a little uneasy by the Swiss society's position and made its displeasure widely known.

After some discussions, the Swiss have backed away and issued a new statement. This one says that the Board of Directors of the national society has not yet reached any definitive decision on the future of Morse testing.

But even here there seems to be a bit of controversy. This is because last November's magazine article was the result of a vote at the annual meeting of the organization's regional presidents. At that gathering, all of them voted to urge the abolishment of code exams.

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Texas tower bills

VHF Reflector, Newsline

Two pro-amateur tower and antenna bills are on their way to the Texas State legislature. According to Karl Silverman, N0WWK, one bill is the generic bill that amateurs have the right to put up towers while the other is the specific population density versus antenna height bill. State Representative Patricia Gray will present the two measures.

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That other net

David Splitt, KE3VV

More and more amateurs are relying on the Internet for all types of "off-the-air" communication and information gathering. I have even had a few brief QSOs with Hams on *Qchat*, the audio mode attached to ICQ that is like Microsoft's *NetMeeting*, only better. With the cost of international and cross-country communication via the web as low as the monthly fee charged by your ISP (internet service provider), which averages about $15 a month for prepaid unlimited access, and the message units charged by your local telephone company (which very greatly depending on your calling plan), this is a cheap way to make QSO skids, read the latest pontifications from the ARRL, check a Dxepedition log for your call, track down QSL managers, and update your logging software.

One of the recent rumors heard both on the air and in several internet forums (as well as several e-mail inquiries to this column) is that the FCC and local phone companies are planning to redefine the service provided by ISPs to allow your local telco to charge the same per minute access fees that they charge for hooking you up to long distance telephone carriers. Even at a few cents per minute, these charges add up when you make a lot of long distance calls. Imagine what that would mean for hours and hours of on-line use of the

Internet! The Chicken littles were out in force, predicting that the conspiracy between the Feds and Big Business would have us shelling out for web connections by the end of last year. In case you haven't scrutinized your phone bill lately, it hasn't happened.

And it isn't likely to happen either. If you have lost any sleep over this non-crisis, you might be interested in the background facts.

Way back in 1996, the FCC requested public comment on issues relating to the changes that ISPs and similar out-fits pay local telephone companies. On May 7, 1997, the FCC decided to leave the existing rate structure in place. In other words, the FCC decided not to allow local telephone companies to impose per-minute access charged on ISPs. The FCC web page, in responding to this rumor, published the following notice:

"**Please Note:** There is no open comment period in this proceeding. If you have recently seen a message on the Internet stating that in response to a request from local telephone companies, the FCC is requesting comments to isp@fcc.gov by February 1998, be aware that this information is inaccurate."

A brief explanation of the issue is in order. The charges for each long distance telephone call include per-minute fees that the long distance carrier pays to the originating and terminating local telephone companies for use of their facilities, are referred to as "access charges."

In a nutshell, the FCC does regulate interstate telephone charges, but does not regulate the rates that enhanced service providers (such as ISPs) charged to their customs. ISPs purchase a large number of local phone lines or "trunks" (which all may have the same telephone number) so that customers can dial up to gain Internet access. Under FCC rules, ISPs are considered "end users" when they purchase phone lines from the local telco. For this reason, ISPs pay the same rates for phone lines as any other business, and these rates are set separately in each state (usually by the Public Service Commission, or similarly names state government regulatory agency). By contrast, long-distance companies are considered "common carriers," (oddly enough, so are interstate bus companies and airlines) and they pay interstate access changes regulated by the FCC.

The business phone lines used by ISPs usually include a flat monthly charge and a per-minute charge for making outgoing calls. Because ISPs receive calls from their subscribers rather than making outgoing calls, ISPs generally do not pay any per-minute charges for their lines which is the main reason many ISPs do not charge per-minute rates for Internet access. On the other hand, the interstate access charges paid by long distance phone providers include per-minute fees for both outgoing and incoming calls. The rate levels of interstate access charges are also in many cases higher than the flat business line rates ISPs pay today.

So where do the rumors come from and why do they persist? Hey! Big Brother is everywhere. Right? In fact, the debate is over whether enhanced service providers should be required to pay access charges because they use local telco networks just like long-distance carriers. In June 1996, four "local" telephone companies (Pacific Bell, Bell Atlantic, US West, and NYNEX) submitted studies to the FCC concerning the effects of Internet usage on their networks. They argued that the existing rate structure did not reflect the costs imposed on local telephone companies to support Internet access, and that Internet usage was causing congestion in part of the local network. Several local phone companies have asked the FCC for authority to charge interstate access charges to ISPs, although none have filed a formal petition for rulemaking.

The FCC did look at the issue when it requested public comment in December 1996, on whether ISPs should pay interstate access charges and whether ISPs should be treated as end user or common carriers..." As part of its Access Reform proceeding (Common Carrier Docket 96-262), the FCC (waaaaay back in December 1996) requested comments on the treatment of ISPs and other "enhanced service providers" that also use local telephone companies' facilities. Since the access charge system was established in 1983, enhanced service providers have been classified as "end users" rather than "carriers" for purposes of the access charge rules, and therefore they do not pay the per-minute access charges that long-distance companies pay to local telephone companies.

In the Access Reform Order, FCC 97-158, adopted May 7, 1997, the FCC concluded that the existing rate structure for ISPs should remain in place. In other words, the Commission decided affirmatively that ISPs are not require ' to pay interstate access charges.

When it began the Access Reform proceeding, the Commission also issued a Notice of Inquiry (CC Docket 96-263), which asked for comments on a broad range of issues related to use of the public switched telephone network by ISPs and other interstate information service providers. A Notice of Inquiry is a request for information that does not involve any specific proposed action, or fulemaking proceeding. The FCC's Access Reform order stated that the purp0ose of the Notice of Inquiry was to develop a record on which a Notice of Proposed Rulemaking could be drafted to facilitate more efficient structuring of data networks. The FCC has stated that the NPRM will consider actions other than imposing per-minute access charges on ISPs.

The FCC did issue a completely unrelated public notice (DA 98-2) in January 1998, in connection with a report to Congress on universal revise. As part of the FY 1998 Congressional appropriation legislation, the FCC was required to submit a report to Capital Hill on a number of issues, including the legal status of Internet services under the Telecommunications Act of 1996. But that report did not raise the specter of long distance access fees for the Internet.

By the way, if you really want to keep up on what is being whispered and shouted into the ears of the FCC (on issues like ISP rates and other items, such as Amateur Radio license restructuring), all formal comments are available f review in the FCC Reference Center in Washington DC, and copies may be purchased through International Transcription

Services (202-857-3800). Copies of comments submitted electronically are available for review at http://www.fcc.gov/ccb/comments.html.

While we are burying rumors, we might as well throw the last shovel of dirt on the "FCC modem tax" that has been floating around the Internet in various forms for several years. The "modem tax" referred to is a 1987 proposal that would have required 1987 proposal that would have required ISPs to pay interstate access charges (which were much higher then). That proposal was abandoned in 1988. The current Access Reform proceeding is entirely separate. If this doesn't give you all the reassurance you need, hop on the web and check out the Access Reform page on the FCC website at http://www.fcc.gov/isp.html.

It seems that there is a bit of a lull lately in FCC action affecting Amateur Radio, most likely because they want to make us sweat out the restructuring rules. Several readers have asked for an "across the back fence" explanation of the RF exposure rules, and we can surely tackle that one (If your ears get warm and your tie clip glows, you may be working yourself rather than the Spratlys).

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taken from The Keybird Kronicles
March 1999
De TIM NL7SK, 73

March was a truly hussle/bussle month, packed to the gunnels with public service events that hams dearly love. For the most part, all of our commitments were met with only some minor glitches and system train wrecks. Being very flexible type folks, hams always seem to find a way around communication problems that in the real world have been known to shut down civilizations and topple the Temple of Technology that humanity insist on surrounding itself with. On two seperate occasions, the repeater systems in the Mat Valley area, crashed and we had to fall back to the KL7ION unit in Anchorage. At this time, I'd like to thank LIL, NL7DL and RICK, KL7YF for permission to use the KL7ION machine. The Marvins have always been willing and able to help out when the rock and the hard place are closing in. They should be listed in the dictionary under ROLE MODEL or HAM.
The first problem we faced, was just prior to the JR. IDITAROD, when the 147.09 repeater was vadalized and abused to the degree of only being able to respond with the message "DON'T HIT ME AGAIN". The repeater needed parts and could not be used in it's present state with solar cells barely keeping it alive and wind/gen components in tatters. We switched to the linked repeater system that feeds the .640 unit, but due to irregular terrain, found complete coverage could not be maintained. Enter stage left, the KL7ION repeater to the rescue. The JR. IDITAROD was a success, the kids made the big loop and returned in good time and spirits for their awards and a meal of spaghetti with mystery meat sauce. [See recipe for slow dog stew] There was a good turn out of ham volunteers and they performed their duties in a top notch manner. The general public had a good time too from what I could see from my start and finish line station. The second day on the lake, awaiting the finishers to arrive, resembled a scene from the old movie "The Dawn Patrol", with swooping aircraft taking pictures and spotting the leading teams. A few low passes caused me to check my hat for tire tread marks. A good time was had by all even when one team decided to take a short cut under a parked truck at the finish line. It gives an entire new meaning to the term "Wedgie" and I swear the lead dog had a smirk on her face that said "Gotcha".
Problem number two developed during the BIG IDITAROD restart. The 146.850 repeater was working perfectly right up to the official restart time. All the check points from the new Wasilla airport to Knik Lake were in place and operating, when the repeater decided that it was a day of rest and pitched a hissy fit. Ken, WB7SFO, tried to jump start it but was unable to get things back on line in time. Ken, next time use a bigger hammer! Rick, KL7YF, broke in with the offer to use the KL7ION machine. With some 1,000 panting puppies headed our way, it sounded like a deal we couldn't refuse. I was at Knik Lake with John, KL0CY. A great day for dog racing, bright sunshine, no wind, and just cold enough to remind a person not to touch their nose with a sudden movement as the "TINK" noise you hear might be caused by an icicle with nostrils bouncing off the toe of your boot. The folks running the check point seemed to be mike shy, so John glommed the microphone on the P.A. system and gave the folks a well informed series of comments on each dog driver and team as they checked in. Good show John, does this mean that Letterman and Leno are on thin ice? I know we weren't, where I was standing the lake had to frozen about four foot deep. The event, once started, went pretty flawlessly. The first team hit the Knik Lake check point in one hour and two minutes. At times we had three teams arriving at once, but the dog handlers sorted everyone out with great skill. If you have never been to a major dog sled race, you're missing out on a great amount of fun. Thanks to all for coming out for the restart. Our portion of the last great race was over in a flash. We wish all the Iditarod folks good luck and safe trail to NOME. We'll see you next year.
To change the subject for a bit, the MARA club has a meeting on March 26th at the MATANUSKA TELEPHONE building in Palmer. Time is 1900HRS [that's 7 pm for you folks in Spenard]. We have alot of stuff to work on. A new President must be chosen and we must get in gear for the April hamfest. At this time it looks like a one day event at the Palmer train depot. Shooting for the last Saturday in April, the 24th. A nice main door prize will be presented in the form of a RADIO SHACK handy talky [HTX 202] and the usual hourly door prizes will be available. Hope to have a VE testing session too. We are running late on planning this hamfest and we can use your input. We have leaflets to print and pass out. We have tables to rent and door prizes to be donated. Remember that this is the club's main fund raiser for the year and we sure could use your help in making it successful. This coming year could stretch our shoe string

budget quite a bit. We might have to replace the .850 machine completely. More about that later. Please keep an ear tuned to the NETS for any changes on the hamfest schedule. I had better close this for now or Chris, our newsletter editor will be whipping out the scissors of serious selection and perform a wordectomy. See you at the meeting. Tnx again for the help.
De TIM NL7SK, 73.

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Emergency! Mayday! Help!
From the The Keybird Kronicles
March 1999

Actually, it's not a real emergency, but there are frequencies that are used for emergency or rescue situations, and they may make for interesting listening. Program these following frequencies into the scanner, or put those zillion plus unused memory channels to good use.
3920 KHz and 14292 KHz are amateur frequencies used during emergencies, and are reserved for emergency use only when activated during an actual crisis. 5168 KHz is also used by amateurs, but only during emergencies. our local ARES group is asking the FCC for permission to use 5168 for drills, but for now, that is an actual emergency only frequency.
Other HF channels of interest are 4125 KHz and 10494.4 KHz, operating under the callsign of WIN36 and WGY980.
On the VHF side, monitor 155.295 MHz, the Division of Emergency Services (DES), and 155.250 MHz, the State Trooper emergency frequency. If your radio supports the AM aircraft band, monitor the Rescue Coordination Center channel of 123.100 MHz for the straight scoop on various searches and rescues.
Don't forget good old CB channel nine, monitored by REACT, the CB band version of ARES.
I would like to devote some space in an upcoming issue to the science and art of scanning, and would greatly appreciate the submission of your favorite frequencies. I can be reached by e-mail, gcbrosh@ptialaska.net, by phone at 373-7397, or on the air on 146.41. Help us fill all of those empty memory channels on our HT's.

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Are we having fun yet?
Taken from The Keybird Kronicles
March 1999

Our club recently provided radio communications for the Junior Iditarod race, and from my perspective, I'd have to say that if Murphy didn't win, he sure made a good showing. My personal experience was interesting and unique, although it was not exactly of great use to the race or the club. It was of great utility in pointing out some large holes in my personal preparedness for an emergency, and I offer my experience and comments in the hope that others behind me will avoid the mistakes I made with the idea of being just a bit nore useful to the mission.
My assignment, if I chose to accept it, was to man the checkpoint at Burma Road number 2. This would have been a little easier had I actually known where the checkpoint was! A map would have helped, but there wasn't one available. With the aid of a verbal description , I believed that my daughter Shana and I could find the checkpoint. Off we set down the trail on our trusty iron dogs, looking for the requisite landmarks, until we arrived at what I believed to be our checkpoint. Unfortunately, we actually arrived and set up by the Aurora Dog Track off of south Big Lake road. OOPS number 1.
Problem number two popped up when I tried to access the chosen repeater. I was unable to access the 146.64 repeater using my handheld and rubber duck, even with the aid of external power in the form of the snow machine battery. OOPS number 2.
Had I been able to access the 146.64 machine, I could have asked if I was in the right spot before the teams started running through, since we couldn't go on the trail with the teams on it. By the time I was told that I was off by about eight miles, it was too late to get into the correct place. OOPS number three.
Since we were unable to access the 146.64, we tried raising headquarters on the 147.30 machine. By the time we had attracted the attention of HQ, several teams had gone through our impromptu checkpoint, and we had to rely on our memories to report who had gone through. Unfortunately, our memory was not sufficient, or particularly accurate, and we transmitted incorrect information back to HQ. OOPS number four.
I offer the following suggestions to those who may be tempted, in the future, to volunteer at various events.
Get a real live map, or find your assignment beforehand, to confirm that you are in your assigned area. There is a specific reason for you to be assigned there, so it helps greatly if you are, in fact, where you need to be. The person or persons in charge should ideally equip the volunteer with a usable map, or a detailed verbal description, or volunteers should be well familiar with the area in question before accepting the assignment.
The person on the trail should be over radioed, rather than under radioed as I was. A J-Pole antenna made from twin lead should be standard equipment for anyone hitting the trail, and a walking stick or similar portable beam would be even better. I had considered, and sadly rejected taking my mobile rig and a J-Pole, both of which fit easily into a hard shell camera case, but figured that the handheld would be adequate for the task at hand. At least I was packing my auxiliary power cord, which has the proper adapter at the radio end and color coded alligator clips at the battery end. Most HT batteries are usable for an hour or two at best, which means you really need either a spare charged battery or some external supply. Most recreational vehicles, four wheelers, snowmobiles and such, are equipped with electric start, which of course means that they have batteries. A fully charged

snowmobile battery will run a HT for several hours, and if you run the battery down, it is a simple matter to start the sled and charge the battery up again. If you don't already have your zip cord and alligator clip power cable ready, now is the time to lash one up and stash it in the go bucket. One never knows what trail they may have to cover.
About the only part that went well was using the 147.30 machine as a backup for those unable to access the 146.64 or 146.85. Well, there was also that nice trail ride, which is always fun, and souvenir doggie booties for the picking.
Finally, the lessons learned on the field trip to the school of hard knocks was well worth the experience. Are we having fun yet?

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LOW-FREQUENCY EXPERIMENTAL LICENSE ISSUED
The ARRL Letter

Some US experimental activity is coming to LF! The FCC has granted a one-year experimental license to the Amateur Radio Research and Development Corporation to conduct tests on the frequency 136.75 kHz. Experiments would be carried out from 12 Northern Virginia sites using the call sign WA2XTF. These experiments are to gain low-frequency experience in anticipation that the FCC may allocate a band at 136-kHz to Amateur Radio.
Last October, the ARRL petitioned the FCC to create two amateur LF allocations at 135.7-137.8 kHz and 160-190 kHz. The League asked for a 200 W PEP power limit (no more than 2W EIRP) and requested the new bands be made available to those holding a General class or higher license for CW, SSB, RTTY/data, and image emissions.
Several countries throughout the world already enjoy LF allocations around 136 kHz. These include New Zealand, Great Britain, the Republic of Ireland, and several European nations.
Emissions authorized for these tests include 173-Hz and 450-Hz bandwidth frequency-shift data and 100-Hz bandwidth CW. The authorized transmitted power is 1 W ERP. The 12 stations will operate experimental transmitters, antennas and receiving systems using digital signal processing techniques. Participating in the experimental operation are Glenn Baumgartner, KA0ESA; David Borden, K8MMO; Robert Bruhns, WA3WDR; Hal Feinstein, WB3KDU; Terry Fox, WB4JFI; Andre Kesteloot, N4ICK; George Lemaster, WB5OYP; Shannon Mishey, N8TBM; Paul Rinaldo, W4RI; David Rogers, K9RKH; Elton Sanders, WB5MMB; and John Seely, AA4GM. Rinaldo is the ARRL's technical relations manager.
While the list of stations is closed and new transmitting stations cannot be added, others are invited to join the project by listening and reporting results. Reception reports should be sent via e-mail to Andre Kesteloot, N4ICK, n4ick@amrad.org.
Further information concerning these LF experiments will be available in the AMRAD Newsletter mailed bimonthly to AMRAD members and available at http://www.amrad.org.

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FCC SUSPENDS ALLEGED GRIZZLY PEAK CONTROL OP FROM VHF/UHF
The ARRL Letter

The FCC has taken another step in its investigation of alleged rulebreaking and impropriety on the K7IJ Grizzly Peak repeater system. In the latest action, the FCC has notified Blake B. Jenkins, N6YSA, of Berkeley, that his amateur VHF/UHF privileges were being suspended for 120 days as of March 5. Jenkins has been identified as the primary designated control operator of the four K7IJ VHF and UHF repeaters. Citing what it called "an alarming and unacceptable lack of control" over the operation of the repeaters, the FCC on March 2 shut down the K7IJ system for 120 days while it continues its investigation. FCC officials have not visited the site in person, however, and no equipment has been seized.

In a letter to Jenkins dated March 3, FCC Amateur Radio enforcer Riley Hollingsworth, K4ZDH, said FCC monitoring indicated that Jenkins "encouraged and solicited unlicensed radio operation on the repeaters." Hollingsworth also accused Jenkins of using his ham station "to solicit the jamming of other licensed repeaters" after the K7IJ repeater system was shut down.

The FCC letter seeks information from Jenkins on his role and activities while K7IJ repeater control operator. Hollingsworth's letter also referred briefly to the "Ham Radio Jamming" section on the N6YSA Web site, "on which you provide circuit descriptions of jamming devices and techniques." Pages dealing with jamming hardware appear to be no longer available. Hollingsworth said the FCC continues to look into the conduct of an alleged secondary control operator Steven R. Rossi, KE6LNH.

Meanwhile, Hollingsworth said he and K7IJ licensee Bruce Wachtell spoke by telephone after Wachtell--a shipboard radio operator now in the Pacific--reached port in Hawaii. Hollingsworth said the FCC still expects a written response from Wachtell addressing the Commission's concern about the repeaters' operation.

In a related move, the FCC also set aside recent license grants or upgrades of four operators while it continues its investigation. The FCC also issued warnings to two other individuals.

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HAM RADIO-CARRYING RAFT EXPEDITION HITS A SNAG

The ARRL Letter

Sea worms and storms have gotten the best of La Mantena, a 50-foot balsa log raft skippered by John Haslett, KC5KHA, of Dallas, Texas, as part of an educational and research venture. The vessel, first launched last October, has been attempting to retrace the trading routes of ancient Ecuadorian mariners by sailing from Ecuador up the Central American coast to Mexico. Ultimately, the expedition plans to attempt to cross the Pacific to Hawaii. But the voyage has run into problems and has had to be scuttled in the Pacific some 160 miles southwest of Costa Rica.

The Mantena's balsa hull has twice been infested by a type of destructive sea worm. The earlier infestation necessitated a repair and rebuilding stop last fall and winter, and Haslett, 34, thought he had the problem licked. But the steps taken then to prevent a recurrence--including liberal applications of tar--apparently were not successful. Decay also has affected some of the manila rope that binds the logs together. To add insult to injury, the raft had been trapped in the gyre--a large ocean whirlpool—and literally was going in circles under its influence.

After bad weather further impaired the vessel's ability to navigate, Haslett's wife, Annie, reported that the crew had accepted an offer from the Costa Rica Coast Guard to rescue the crew and vital supplies and equipment as well as vital raft components. The raft's sails, hardwood masts and cross members and some of its center beams have been towed to Costa Rica. The rest of the vessel was abandoned. Annie Haslett says the team's plans call for rebuilding the raft and continuing the long voyage. The raft had a crew of four, including Haslett.

Aboard the Mantena, Haslett had been maintaining Amateur Radio schedules with schools and other groups in the US and around the world on 20 meter SSB. The expedition also has been using Amateur Radio for routine communication with the mainland. In 1993, Haslett built a 20-ton balsa raft Illa Tiki in Ecuador, then traveled some 750 nautical miles aboard the vessel. It, too, was plagued by shipworms.

Annie Haslett said the expedition team expects to take a month to rebuild "and they will embark on the adventure again."

For more information, visit the Manteno Expedition Web site, http://www.balsaraft.com/

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FCC TACKLES HF "SPLATTER" CASES

The ARRL Letter

The FCC has written nearly two dozen Amateur Radio licensees whose 20-meter SSB signals were said to be "unusually wide, overpowered, or both." The FCC's Riley Hollingsworth did not identify the specific licensees involved, but he said some of them were believed to be over-the-road truckers operating mobile. Licensees were in several locations, including Illinois, New York, Mississippi, Arkansas, Puerto Rico, Ohio, Kentucky, North Carolina and Florida. Hollingsworth's letter said information received by the FCC indicates that the stations involved "ignored requests from other licensees operating on adjacent frequencies" to do something about the wide signals. He said the operations in question were believed to be confined to the high end of the 20-meter band, above 14.300 MHz.

A letter from Hollingsworth to 22 Amateur Service licensees requests fixed and mobile station information about the use of and specifications for any linear amplifiers employed on 20 meters as well as the use of automatic level control (ALC) and mike gain settings.

Hollingsworth cited Section 308(b) of the Communications Act of 1934 as authority for the inquiry, calling it "our most powerful inquiry tool." He said the section "gives the Commission the authority to require information from a radio licensee during the term of the license that will enable it to determine whether that licensee is qualified to retain a license."

The affected licensees have 20 days to provide answers to th FCC. Hollingsworth's letter pointed out that hams are prohibited from occupying more than the necessary amount of bandwidth for the particular mode and that hams must use the minimum power "necessary to carry out the desired communications."

Hollingsworth emphasized that the letters were not warning notices but letters of inquiry.

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This was submitted by Rosemary, KL7LA, it was taken from page 28 of the QST Magazine in the wonderful year of 1950. Thanks Rosemary

Calling CQ

When I call CQ while using the key,
At least one station will come back to me.
For on CW a guy makes a choice
By the strength of the signal and not by a voice.

I call CQ on ten meter phone.
I twist the dials - wear my thumb to the bone.
I try it again, I yell and I yell.
Do they answer me? No!! They call a YL.

At last I got mad and said to my wife.
Come here sweetie pie and help save my live.
Put out a CQ on this old pile of junk.
Let's prove this YL biz is true or the bunk.

She calls CQ in her sweet - mannered styled.
Ye gads!! Hear the answers - i didn't touch the dial.
They gave her reports of R5...S9...plus.
Not in all my experience have I heard such a fuss.

She kept it agoing for quite a long time.
Oh! Boy! Am i happy, someones on the line.
I said, sweetie pie thanks a lot for the help.
Now give me the mike, let me give him a yelp.

Now I now band conditions can change mighty fast.
But I can't understand how her contact can last;
For soon as she's finished and I take the mike.
QRM blanks me out and the guy has to hike.

I'm going back to CW where all CQ's hit.
Where I get many answers and don't have to sit
And holler and shout and call to beat hell
Then hear the guys answer a sweet - voiced YL.

But on second thought, I think I will stay
On ten meter phone and enjoy every day.
Now why should i crawl up on some shelf?
I'm going to answer some YL myself

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Elmer 101 and Low-Cost QRP Tranceivers

by... Jim Larsen - AL7FS
AK/QRP #003

Visit the Alaska QRP Club HomePage at:
http://www.ptialaska.net/~bhopkins/akqrp/

In the last article I covered minimalist style QRP transceivers that cost only $10 to $20. See URL: (http://www.ptialaska.net/~bhopkins/akqrp/AL7FS.html). This month I am going to discuss a very educational book recently made available that steps you through building an 80, 40 or 20 meters superheterodyne (superhet) CW transceiver (2 watts). It also covers all the theory within the radio. It is called Elmer 101 and was published in the last issue of QRPp (Norcal QRP Club). Two very small, very good QRP transceivers for under $100 will be described.

Elmer 101 - Learning Theory for Fun

In the early days of winter 1997 - 1998, there were QRP Operators on the QRP-L Mail List that were wanting a fun transceiver project that was more than just plugging in parts on a board. They wanted to learn from the experience and they wanted to help other hams, new and old, to learn the theory behind the QRP transceiver. A general call went out to the list for knowledgeable hams to act as Elmers (Elmers: Hams who help hams or prospective hams with technical or other issues) for the building of a 40 meter QRP CW transceiver.

One of the exciting aspects of the QRP-L Mail List (*information near the end of this article*) is that a large number of the people that you have seen writing articles (for ham radio magazines) over the years hang out on QRP-L. These technically savvy hams raised their collective hands and volunteered to author course material for the building of a transceiver. The course was dubbed Elmer 101.

The only thing left to do was to decide on which QRP transceiver kit would become the centerpiece of the Elmer 101 course. After much interesting discussion on QRP-L, Dave Benson, NN1G, of Small Wonder Labs, offered to update and improve his already well-known classic SW40 CW QRP transceiver. (The SW40 design was published in the November 1994 issue of QST and serves as a centerpiece in the ARRL's anthology, "QRP Power".)

The circuit and thus the PCB (printed circuit board) were upgraded and the kit was offered at $50 (Did not include the cabinet and chassis mounted wiring and parts) for the class members. This tiny little 2-watt CW transceiver had already proven to be a real performer and now it was even better. The rig was renamed the SW40+.

Getting Started

Elmer 101 began with a list of prerequisites for each prospective "student" to study as preparation for the actual course. Then, slowly, at a pace geared to allow each student to build and learn, the course unfolded.

I was fortunate to be subscribed to the QRP-L mail list during the development and rollout of the Elmer 101 course. I had been a ham operator for over 32 years, had passed my Amateur Extra Class tests, but in spite of all this opportunity, I still did not understand the inner workings of a modern day CW transceiver. This approach to learning was to be one of the most exciting periods of my ham career.

The prerequisites had me actually reading and studying from the ARRL Amateur Radio Handbook. This material kept me plenty busy as I ordered and waited for delivery of my Small Wonder Labs SW40+ kit. By the time the kit arrived I was ready to begin studying each chapter of the Elmer 101 course. The basic approach was to read the theory, relate it to the schematic and then build and test that section of the transceiver.

The beauty of this course was that if you got stuck or needed help in any way, you could ask the question to the entire QRP-L Mail List group. Always, the answer would be posted in terms designed to help each student grow. (This help is still there today!)

Day-by-day and week-by-week, the theory began to grow in my head. The transceiver grew section by section. The transmitter section was scheduled into the process such that it could be used to test the receiver sections. Gradually, the mystery of a CW transceiver was reduced to such a level that I could enjoy looking at a schematic without getting too frustrated. I had finally learned theory and married it to practice.

Today, the Elmer 101 class is complete. Many SW40+ transceivers have been built and are now operating on the air. This little rig from Small Wonder Labs is available in mono-band form for 80, 40, 30 and 20 meters. While I built mine for the class target band of 40 meters in the Elmer 101 course, I think the 20-meter version would be especially useful for hams in Alaska. This rig costs only $55 postpaid in the US. You can provide all your own chassis parts and chassis or an enclosure kit (shown above with customized labeling) is also available at $35 plus $3 shipping and comes with all harnesses, connectors and controls. As discovered on my business trips to the Lower 48 states, it is a real performer. I have had successful contacts right from my hotel room with a
long-wire antenna dropped out of the window.

This rig is a single-board transceiver, 2.8" x 4.0", uses a commercial-quality board, has true VFO coverage of 35-40 kHz and uses a superheterodyne design with crystal filtering.

Elmer 101 Course is Still Available

Because of the huge success of this program, the Northern California QRP Club (NorCal) broke from tradition and devoted an entire QRPp issue to the Elmer 101 QRP transceiver experience. The Fall 1998 issue presented the same material found on the Internet but now it was consolidated into one complete bound volume and it included additional material directly related to the building of the transceiver. After the QRPp issue was released, the demand was still so strong for the Elmer 101 material that NorCal granted rights to Paul Harden, NA5N, to reproduce and sell the materials on an ongoing basis. Paul runs a printing shop and he is providing the Elmer 101 bound course book at or near cost for $12 postpaid in the US.

If you would like to have the fun of building and understanding a QRP transceiver while spending less than $100, here is a wonderful route to travel. The sources are as follows:

Elmer 101 Course Book

Paul Harden, NA5N
Quicksilver Printing
Elmer 101 Offer
PO Box 757
Socorro NM 87801
pharden@aoc.nrao.edu

Small Wonder Labs

SW40+ (also available on 80, 30 or 20 meters)
Dave Benson, NN1G
Small Wonder Labs
80 East Robbins Ave
Newington, CT 06111
bensondj@aol.com
http://www.fix.net/~jparker/sml.html

Wilderness Radio SST Series Transceivers

One back-packable CW transceiver that remains popular is the Wilderness Radio SST series of radios. These mono-band kits are available for 40 through 20 meters and are one of the smallest CW transceivers on the market. This tiny rig measures only 1.5" x 3.2" x 3.5" and has a weight light enough to please backpackers. As such, it has become a favorite of campers and hikers all over the world. Its small size coupled with its low current drain make it a perfect rig for the field.

SST Features:

- 2 watts out (varies w/band and supply voltage), adjustable down to zero
- 3-pole crystal filter at a low I.F. (about 4 MHz) built-in, no-adjustments AGC with received signal indicator LED
- stable VXO coverage of 10 to 20 kHz using varactor tuning (range varies w/band) and range can be extended by switching in different varactors or by paralleling a second crystal. (See Notes and Mods info below.)
- very low current drain--about 15 mA
- stable operation from 10 to 16VDC, or internal 9V lithium battery

The price for each complete SST (includes case) is $85. Shipping in the US is $3.25.

Contact:

Wilderness Radio, Bob Dyer, KD6VIO
P.O. Box 734
Los Altos, CA 94023-0734
(650) 494-3806
qrpbob@datatamers.com
http://www.fix.net/jparker/wild.html

Next month

Next month I will talk about an amazing new all band QRP transceiver kit that is now available. It is called the Elecraft K2 and has the QRP world all "a-buzz" over its design. It's specifications and capabilities rival even the top line Ten Tec rigs. There is also an Elmer 200 class currently in progress on QRP-L. Details next month.

QRP-L Mail List

As you find a need for more help in your homebrew endeavors, you should consider subscribing to the ever growing QRP-L mail-list by going to the QRP Internet Club at http://qrp.cc.nd.edu/QRP-L/ . Go to member information and subscribe. As of March 1999 there are over 2,750 QRP enthusiasts subscribed. This mail reflector will open the doors to what ham radio historically was all about: Hams helping hams and everyone having fun.

Additional Information

Some material in this article was taken from and thanks go out to:

- Small Wonder Labs: http://www.fix.net/~jparker/sml.html
- Wilderness Radio: http://www.fix.net/jparker/wild.html
- Elmer 101 Key Pages: K5FO: http://www.ticnet.com/k5fo/
- KU4QO: http://www.qsl.net/kf4trd/faq.html
- KD7S: http://www.psnw.com/~kd7s/hbcabs.html
- Notes and Mods for the SST from QRP-L: http://www.homeusers.prestel.co.uk/g3ycc/sst1.html
- Mouser (for parts): http://www.mouser.com/
- Cool links: http://www.njqrp.org/data/links.html

AL7FS was originally licensed as WN0LPK in March 1965 (WA0LPK from 1965-1985). Jim is a member of the Anchorage Amateur Radio Club and the South Central Radio Club. For a while he was a Moonbounce (EME) fanatic and earned 2 meter WAS #36. Even then he operated in QRP style, using only about 600 watts output. Jim has participated in HF from 160-10 meters (CW and SSB), packet, satellite, 6 meter, UHF, VHF, ATV, DX, and QRP. QRP has lasted the longest and the strongest - 1970 to 1999.

QRP Frequencies

http://www.njqrp.org/data/qrp_freqs.html

BAND	CW MHz	Notes	Phone MHz	Notes
160m	1.810		1.910	
			1.843	Europe
80m	3.560		3.985	
	3.710	Novice	3.690	SSB Europe
40m	7.040		7.285	
	7.030	Europe	7.090	SSB Europe
	7.060	Europe		
	7.110	Novice		
30m	10.106			
20m	14.060		14.285	
17m	18.069			
15m	21.060		21.385	
	21.110	Novice	21.285	SSB Europe
12m	24.906			
10m	28.060		28.885	
	28.110	Novice	28.385	Novice
			28.360	SSB Europe
6m	50.060		50.885	
			50.285	SSB Europe
2m	144.060		144.285	SSB
			144.585	FM

QRP Transceivers for under $100

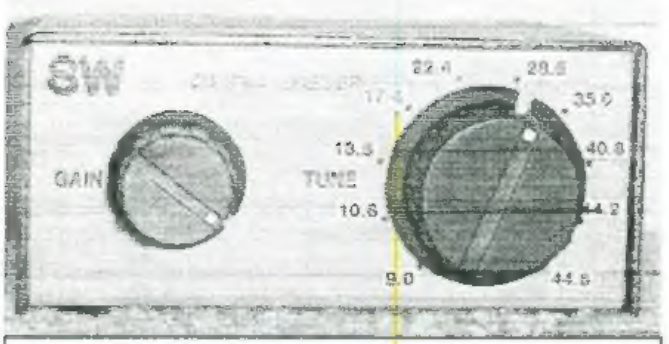


Figure 1: Front view of AL7FS Small Wonder Labs SW40+

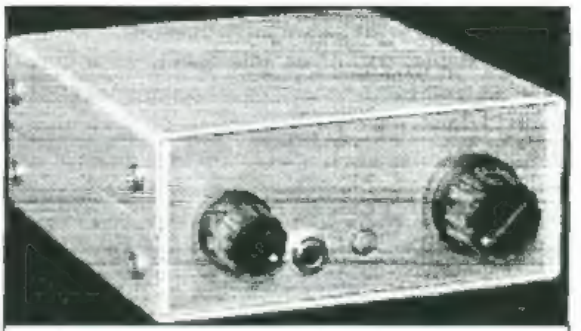


Figure 3: Wilderness Radio SST Transceiver

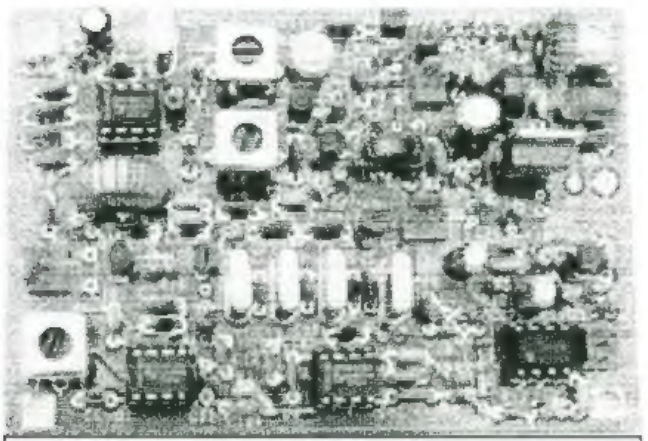


Figure 2: PCB for SW40+

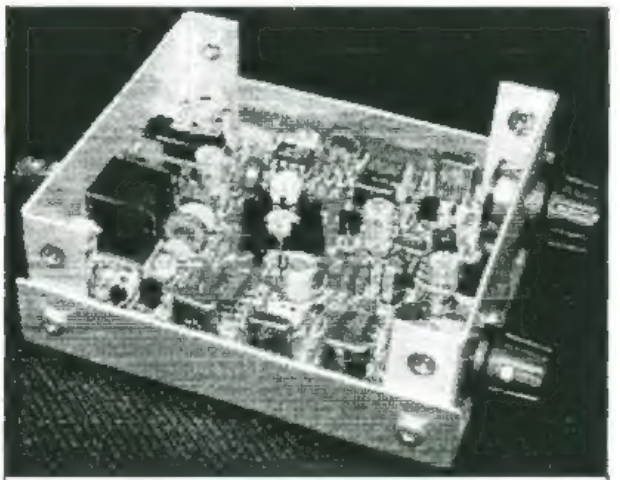


Figure 4: Interior View of SST Transceiver

73, Jim

AL7FS

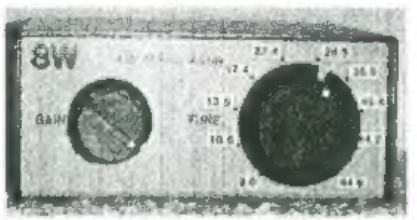
AK QRP#003

Why QRP?

A Report on the Joys of
Low-Power Ham Radio
Presented at the Anchorage Amateur Radio Club (AARC) meeting on April 2, 1999.
7:00 PM at Alaska Pacific University

Presented by Jim Larsen, AL7FS
AL7FS@QSL.NET

All Amateur Radio operators of all classes are invited to attend this unique presentation of QRP Amateur Radio. There will be lots of handouts and QRP gear to see at the meeting. Plan to be there and bring a friend.



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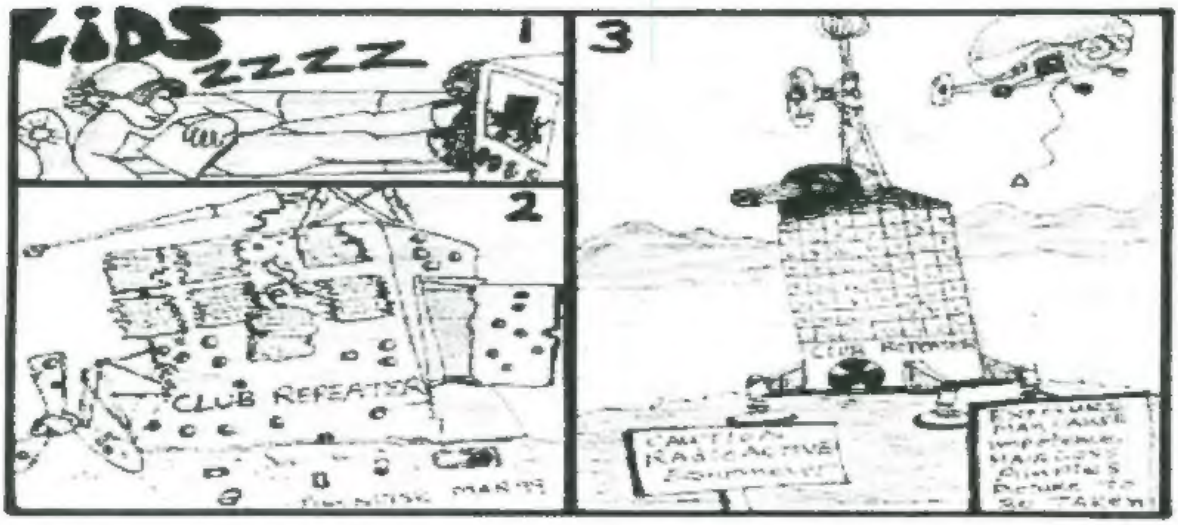

Stretch dozed off while watching the movie "2001 A Space Odessy" and scanning a ham magazine article on keeping remote repeaters secure. Stretch had a dream: A series of units built like space modules to be picked up and delivered by chopper as need be. He awoke abruptly when the dream included a method for the unit to shoot back at vandals, giving a new meaning to the term "ham repeater". *cartoon by NL7SK appeared in March 99 Keybird*